

2018 BMW X1 sDrive 28i FWD (F48) L4-2.0L Turbo (B460)

Vehicle > Powertrain Management > Ignition System > Spark Plug > Service and Repair > Removal and Replacement

REMOVING AND INSTALLING/REPLACING ALL SPARK PLUGS (B32, B38, B42, B46, B48) [REP-REP-RAF4512B38-1212011 - V.12]

Removing and installing/replacing all spark plugs (B32, B38, B42, B46, B48)

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12 12 011 Removing and installing/replacing all spark plugs (B32, B38, B42, B46, B48)



Special tools required:

- 12 1 220
- 12 1 230



Necessary preliminary work:

- Remove ignition coils.



Caution!

Wear safety goggles.

Oil and dirt particles may get into your eyes!

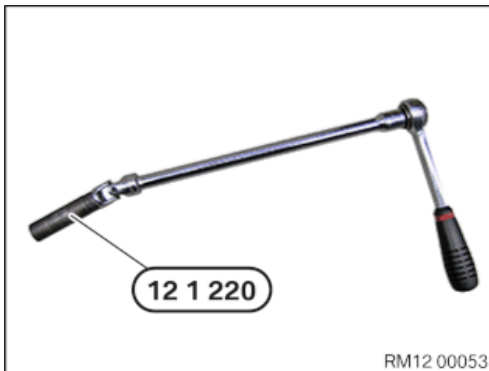
Clean spark plug slot with compressed air.

1. Remove dirt contamination from the spark plug shaft. The spark plug shaft must be cleaned with compressed air after the ignition coils have been removed but before the spark plugs have been dismantled. After removing the spark plugs, check the sealing surface again for dirt contamination and if necessary, clean with a damp cloth or again with compressed air.

Note: Deposits that are not removed according to instructions may enter the combustion chamber and lead to uncontrolled combustion. Remaining deposits in the area of the spark plug seal can lead to leaks and to the spark plugs coming loose during engine operation.

2. Do not grease/oil thread or use any graphite or copper grease. Adhere to the torque values of the packaging information or regulation.

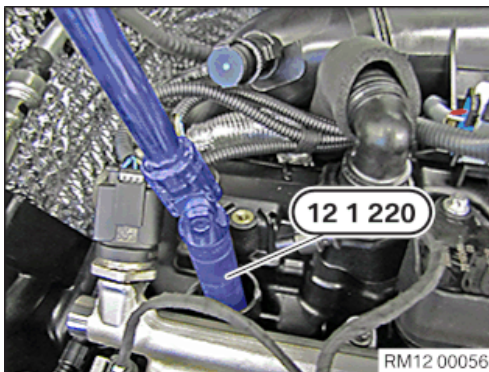
Note: If these instructions are not followed, especially with regard to greasing, this may result in mechanical damage to the spark plug housing/thread. Spark plugs that are not tightened sufficiently lead to leaks and to the spark plugs coming loose during engine operation.

**Removal:**

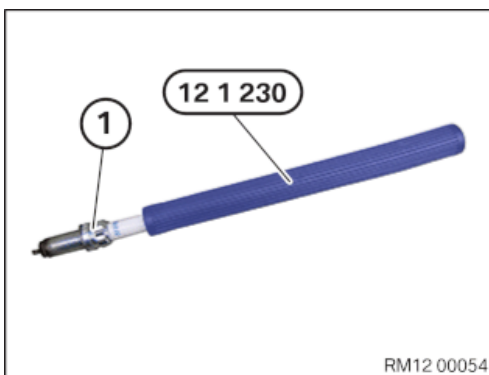
Unscrew spark plugs with special tool 12 1 220 and an extension with joint.

Flexible ratchet extensions must always be used. If rigid mounting tools are used, there is a risk of insulator breakages.

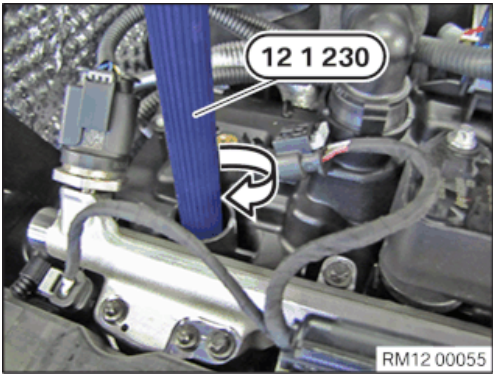
Also do not use a variable plug connection with locking capability as this also poses a risk of insulator breakages.



Unscrew spark plugs with special tool 12 1 220 and an extension with joint.

**Installation:**

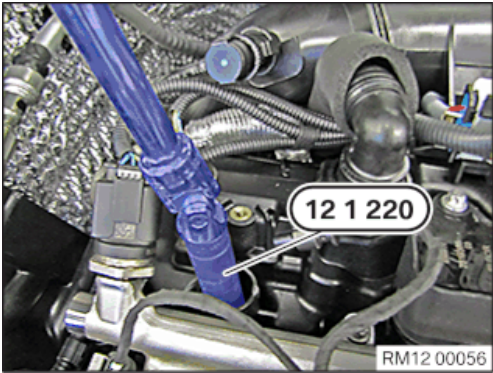
Insert spark plug (1) into the special tool 12 1 230.



Do not let spark plugs fall into the spark plug shaft. This can lead to a reduction of the electrode gap and so impair the smooth running of the engine, especially in idle mode.

First screw in spark plug in the engine using special tool 12 1 230 and tighten by hand.

Then tighten spark plug with torque wrench, special tool 12 1 220 and extension with joint.



Flexible ratchet extensions must always be used. If rigid mounting tools are used, there is a risk of insulator breakages.

Also do not use a variable plug connection with locking capability as this also poses a risk of insulator breakages.

Tighten the spark plugs with the torque wrench, special tool 12 1 220 and with extension with joint.

Observe tightening torque.

Tightening torque:

12 12 2AZ	Type	Thread	Tightening specifications	Dimension
2A Spark plugs Z (unlubricated)	B32 / B38 / /B42 / B48/ B46	M12 x 1.25		23±3 Nm



Required follow-up work:

- Remove ignition coils.